

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 5, 8, 10, and 17 were previously canceled. No claims are being added.

Claim 1 is currently amended. Support for the amendment can be found in the specification, for example, at paragraphs [0011], [0012] and [0015].

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-4, 6-7, 9, 11-16, and 18-20 are now pending in this application. Claims 1-4 and 6-7 are under examination.

I. Claim Rejections Under 35 U.S.C. § 103(a) Over Applicants' 131 Declaration

The PTO rejected claims 1-4, and 6-7 as being obvious over Applicants' admission in their '131 Declaration. (Office Action, page 2) Applicants respectfully traverse the rejections.

The PTO simply repeated its statement in the office action dated February 25, 2008 and did not address Applicant's reply submitted on April 24, 2008. Applicants reiterate their argument as follows.

To establish a *prima facie* case of obviousness, there must be "a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 82 U.S.P.Q.2d 1385 (2007). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant's disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144.

The PTO stated that the papers filed by Applicants admit that the base paper and the ink receptive coating were known. Even assuming such a statement to be true (which Applicants do not concede), the PTO has not shown any reason that would have prompted

one skilled in the art to combine the known elements. The PTO stated “[b]ased upon this admission, it would have been obvious to one of ordinary skill in the art to coat the commercially available base paper with a known ink receptive composition at a conventional coating weight in order to obtain an ink receptive medium.” However, this statement does not provide a requisite reason for combining the elements in a manner as claimed, rather is based on improper hindsight.

Applicants respectfully submit that the rejection based on the '131 Declaration is improper. Accordingly, they respectfully request the reconsideration and withdrawal of the rejection.

The nonobviousness of independent claim 1 precludes a rejection of claims 2-4, 6 and 7, which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. MPEP § 2143.03. Therefore, the Applicants request that the reconsideration and withdrawal of the rejection to claims 1-4, 6 and 7.

II. Claim Rejections Under 35 U.S.C. § 103(a) Over Sekiguchi (US 6,485,812) in View of Graumann et al. (EP 0878319)

The PTO rejected claims 1-4 and 6-7 as being obvious over Sekiguchi in view of Graumann et al. (EP 0878319). (Office Action, page 2) Applicants respectfully traverse the rejections. The cited references cannot render the present claims obvious, particularly as amended.

By way of this reply, Applicants have amended claim 1 to recite “the ink-receiving layer comprising at least one hydrophilic or water-soluble polymer which is present in the ink-receiving layer from about 60% to about 90% based on the total weight of the ink-receiving layer” and “said cross-linking agent is present from approximately 0.1% to approximately 5% based on the weight of the hydrophilic or water-soluble polymer.”

The presently recited ink-receiving layer is fundamentally different from what Sekiguchi describes.

As described in the present specification paragraph [0001], the print media are typically categorized into two groups: porous media and swellable media. Porous media's

ink-receiving layer is formed from porous, inorganic particles bound with a polymer binder. Swellable media's ink-receiving layer is formed from a polymeric matrix.

Sekiguchi describes an ink-receiving layer formed from fine inorganic particles, such as alumina hydrate and colloidal silica, as part of a porous medium. Please see *e.g.* Abstract and Col. 5. Sekiguchi does not teach an ink-receiving layer comprising at least one hydrophilic or water-soluble polymer which is present in the ink-receiving layer from about 60% to about 90% based on the total weight of the ink-receiving layer as recited in the amended claim 1. In Sekiguchi, polyvinyl alcohol is used as a binder and is 0.1 to 100 parts by weight per 100 parts by weight of the fine inorganic particles. Therefore the polyvinyl alcohol cannot be about 60% to about 90% of the total weight of the ink-receiving layer.

In contrast, the presently claimed medium is a swellable one comprising a polymeric ink-receiving layer of at least one hydrophilic or water-soluble polymer, such as polyvinyl alcohol, which is about 60% to about 90% based on the total weight of the ink-receiving layer. Here, the water-soluble polymer forms a continuous layer of polymeric matrix.

Furthermore, Sekiguchi does not teach that a cross-linking agent as recited in claim 1 is present from approximately 0.1% to approximately 5% based on the weight of the hydrophilic or water-soluble polymer as claimed in the amended claim 1. Sekiguchi specifically teaches a tetraalkoxytitanium of formula (1) serving as the key cross-linking agent whose content is 0.01 to 10 parts by weight of the fine inorganic particles. Please see Col. 7 and Col. 12. Although it generically describes a cross-linking agent other than tetraalkoxytitanium, it does not provide any specific quantity of the cross-linking agent.

The PTO cited Graumann only to show specific commercially available papers known for use as ink jet recording media substrates. Therefore Graumann does not remedy Sekiguchi's deficiencies.

As such, Sekiguchi and Graumann do not provide any motivation to combine their teachings thereby arriving at the claimed invention. They do not create any reasonable expectation of success because the combination of Sekiguchi and Graumann would lead to a porous print medium that is fundamentally different from what is presently claimed.

Applicants respectfully submit that the rejection based on Sekiguchi and Graumann is improper. Accordingly, Applicants respectfully request the reconsideration and withdrawal of the rejection to claims 1-4, 6 and 7.

III. Claim Rejections Under 35 U.S.C. § 103(a) over Sekiguchi (US 6,485,812) in View of Graumann et al. (EP 0878319) Further in View of Shih et al. (US 6,780,924) and Koike et al. (US 6,777,039)

The PTO rejected claims 1-4 and 6-7 as being obvious over Sekiguchi (US 6,485,812) in view of Graumann et al. (EP 0878319) and further in view of Shih et al. (US 6,780,924) and Koike et al. (US 6,777,039). (Office Action, page 3) Applicants respectfully traverse the rejections.

Because a *prima facie* case of obviousness cannot be based on Sekiguchi in view of Grauman, there is no *prima facie* case further in view of secondary references, Shih et al. (US 6,780,924) and Koike et al. (US 6,777,039).

Accordingly, Applicants respectfully request the reconsideration and withdrawal of the rejection to claims 1-4, 6 and 7.

IV. Claim Rejections Under 35 U.S.C. § 103(a) Over Sekiguchi (US 6,485,812) in View of Graumann et al. (EP 0878319) Further in View of Nigam et al. (US 6,936,316)

The PTO rejected claims 1-4 and 6-7 as being obvious over Sekiguchi (US 6,485,812) in view of Graumann et al. (EP 0878319) and further in view of Nigam et al. (US 6,936,316). (Office Action, page 4) Applicants respectfully traverse the rejections.

Because a *prima facie* case of obviousness cannot be based on Sekiguchi in view of Grauman, there is no *prima facie* case further in view of secondary reference Nigam et al. (US 6,936,316).

Accordingly, Applicants respectfully request the reconsideration and withdrawal of the rejection to claims 1-4, 6 and 7.

Summary

The presently claimed print medium can be distinguished over Sekiguchi and Graumann in at least two aspects.

First, in the present invention, the ink-receiving layer comprises at least one hydrophilic or water-soluble polymer which is present from about 60% to about 90% based on the total weight of the ink-receiving layer. The hydrophilic or water-soluble polymer forms a continuous layer of polymeric matrix as part of a swellable print medium. In contrast, Sekiguchi describes an ink-receiving layer formed from fine inorganic particles as part of a porous print medium.

Second, in the present invention, the cross-linking agent, such as boric acid, is present from approximately 0.1% to approximately 5% based on the weight of the hydrophilic or water-soluble polymer. In contrast, Sekiguchi teaches a tetraalkoxytitanium serving as the key cross-linking agent whose content is 0.01 to 10 parts by weight of the fine inorganic particles. Sekiguchi fails to describe the quantity of the cross-linking agent other than tetraalkoxytitanium, which may also be included in the ink-receiving layer.

Sekiguchi in view of Graumann cannot render the present claims obvious. Accordingly, Applicants respectfully request the withdrawal of the rejections.

CONCLUSION

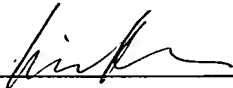
Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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Hewlett-Packard Company
Customer Number: 22879

By 

William T. Ellis
Attorney for Applicants
Registration No. 26,874
Telephone: (202) 672-5485

✓ Qun Liu
Attorney for Applicants
Registration No. 55,392
Telephone: (202) 295-4156